

The claims are not amended. The following listing of claims is provided for convenience.

Listing of Claims:

1. (Currently amended) A method of testing real-world performance of a system under test coupled to a communications network, the method comprising

coupling a device to the communications network, the device comprising a chassis and one or more adapter cards, the adapter cards comprising hardware and software

the device setting up for simulation of a realistic mix of network traffic on the communications network

the device simulating the realistic mix of network traffic on the communications network

the device setting up for engaging in ~~transactions~~ stateful TCP connections with the system under test

the device engaging in ~~transactions~~ stateful TCP connections with the system under test concurrently with the step of simulating the realistic mix of network traffic on the communications network, ~~wherein each transaction includes receiving at least one packet from the system under test and sending at least one response packet in response to the received packet, resulting in additional network traffic on the communications network~~

the device measuring performance of the system under test for the stateful TCP connections under load of the ~~transactions and the network traffic on the communications network including the simulated network traffic from the device.~~

2. (Previously presented) The method of testing real-world performance of a system under test of claim 1, wherein

the system under test comprises an application, the application operative on a server, the application for providing user-level interaction with plural client computers on the communications network.

3. (Previously presented) The method of testing real-world performance of a system under test of claim 1, wherein the system under test comprises a server load balancer.

4. (Previously presented) The method of testing real-world performance of a system under test of claim 1, wherein the system under test comprises a stateful network communications device.

5. (Cancelled)

6. (Previously presented) The method of testing real-world performance of a system under test of claim 1, wherein the simulated network traffic is generated by a stateless packet processor.

7. (Original) The method of testing real-world performance of a system under test of claim 1, wherein the system under test comprises a stateful application which uses underlying services of TCP.

8. (Original) The method of testing real-world performance of a system under test of claim 7, wherein the system under test comprises an HTTP server.

9. (Original) The method of testing real-world performance of a system under test of claim 7, wherein the system under test comprises an FTP server.

10. (Currently amended) The method of testing real-world performance of a system under test of claim 1 further comprising

modifying a behavior of the network traffic simulated by the device

continuing to engage in ~~transactions~~ stateful TCP connections with the system under test

continuing to measure performance of the system under test for the stateful TCP connections.

11. (Currently amended) The method of testing real-world performance of a system under test of claim 10, the modifying step comprising using performance metrics based on the stateful TCP connections to modify the behavior of the simulated network traffic to more closely simulate a realistic mix of network traffic.

12. (Original) The method of testing real-world performance of a system under test of claim 11 wherein the performance metrics are selected from the group consisting of retransmission rate, fragmentation, packet sizes, and drop/reset rates.

13. (Original) The method of testing real-world performance of a system under test of claim 10, the modifying step comprising a user using a control program to change the behavior of the simulated network traffic via a system interface.

14. (Currently amended) The method of testing real-world performance of a system under test of claim ~~10~~13, the modifying step comprising the user managing multiple ports in a coordinated fashion.

15. (Currently amended) An apparatus for testing real-world performance of a system under test coupled to a communications network, the apparatus comprising

a chassis

one or more adapter cards disposed in the chassis, the adapter cards comprising hardware and software, the hardware and software for

setting up for simulation of a realistic mix of network traffic on the communications network

simulating the realistic mix of network traffic on the communications network

setting up for engaging in ~~transactions~~ stateful TCP connections with the system under test

engaging in stateful TCP connections with the system under test concurrently with simulating the realistic mix of network traffic on the communications network, ~~wherein each transaction includes receiving at least one packet from the system under test and sending at least one response packet in response to the received packet, resulting in additional network traffic on the communications network~~

measuring performance of the system under test for the stateful TCP connections under load of the ~~transactions in the conditions of the~~ simulated network traffic.

16. (Original) The apparatus for testing real-world performance of a system under test of claim 15 wherein the adapter cards include a stateless packet processor for simulating the realistic mix of network traffic on the communications network.

17. (Original) The apparatus for testing real-world performance of a system under test of claim 15 further comprising hardware and software for modifying a behavior of the simulated network traffic.

18. (Currently amended) The apparatus for testing real-world performance of a system under test of claim 17, further comprising hardware and software for using performance metrics for the stateful TCP connections to modify the behavior of the simulated network traffic to more closely simulate a realistic mix of network traffic.

19. (Original) The apparatus for testing real-world performance of a system under test of claim 18 wherein the performance metrics are selected from the group consisting of retransmission rate, fragmentation, packet sizes, and drop/reset rates.

20. (Original) The apparatus for testing real-world performance of a system under test of claim 15 further comprising hardware and software for changing a behavior of the simulated network traffic in response to user instructions.

21. (Currently amended) An apparatus for testing real-world performance of a system under test coupled to a communications network, the apparatus comprising

a chassis

one or more cards disposed in the chassis, the adapter cards comprising

~~first means for setting up for simulation of a realistic mix of network traffic on the~~
~~communications network~~

~~second means for simulating the a programmable stateless packet processor to~~
simulate a realistic mix of network traffic on the communications network

~~third means for setting up for engaging in transactions with the system under test~~

~~fourth means for engaging in transactions with a processor executing a TCP~~
application for engaging in stateful TCP connections with the system under test concurrently with
simulating the realistic mix of network traffic on the communications network, ~~wherein each~~
~~transaction includes receiving at least one packet from the system under test and sending at least~~
~~one response packet in response to the received packet, resulting in additional network traffic on~~
the communications network

~~fifth means for measuring performance metrics of the system under test for the~~
stateful TCP connections under load of the transactions in the conditions of the simulated realistic
mix of network traffic.

22. (Cancelled)

23. (Currently amended) The apparatus for testing real-world performance of a system under test of claim 21, further comprising ~~sixth means~~ a controller to instruct the programmable stateless packet processor to modify ~~for modifying~~ a behavior of the simulated network traffic.

24. (Currently amended) The apparatus for testing real-world performance of a system under test of claim 23, the ~~sixth means~~ for wherein the controller using performance metrics to instructs the programmable stateless packet processor to modify the behavior of the simulated network traffic to more closely simulate a realistic mix of network traffic based on the performance metrics.

25. (Original) The apparatus for testing real-world performance of a system under test of claim 24 wherein the performance metrics are selected from the group consisting of retransmission rate, fragmentation, packet sizes, and drop/reset rates.

26. (Currently amended) The apparatus for testing real-world performance of a system under test of claim ~~21~~23, further comprising ~~sixth means~~ wherein the controller instructs the programmable stateless packet processor to modify ~~for changing~~ a behavior of the simulated network traffic in response to user instructions.

27. (Currently amended) An enterprise load system for testing a system under test available on a communications network, the enterprise load system comprising:

first means for simulating real-world network traffic on the communications network

second means for generating ~~interactive transactions~~ stateful TCP connections across the communications network with the system under test, each interactive transaction including receiving at least one packet from the system under test and sending at least one response packet in response to the received packet

third means for measuring performance of the system under test in supporting the ~~interactive transactions~~ stateful TCP connections from the second means ~~despite in the presence~~ of the simulated traffic on the communication network from the first means

a controller coupled to the first means, the controller for changing quantity and quality of the network traffic simulated by the first means

wherein the first means, the second means and the third means operate concurrently.

28. (Original) The enterprise load system for testing a system under test available on a communications network of claim 27, wherein the first means is a stateless packet processor.

29. (Currently amended) The enterprise load system for testing a system under test available on a communications network of claim 27, wherein the system under test ~~software-system~~ comprises a stateful system under test which uses underlying services of TCP.

30. (Original) The enterprise load system for testing a system under test available on a communications network of claim 29, wherein the system under test comprises an HTTP server.

31. (Original) The enterprise load system for testing a system under test available on a communications network of claim 29, wherein the system under test software system comprises an FTP server.

32. (Currently amended) The enterprise load system for testing a system under test available on a communications network of claim 27, the controller further for using performance metrics measured by the third means to cause the first means to more closely simulate a realistic mix of network traffic.

33. (Original) The enterprise load system for testing a system under test available on a communications network of claim 32 wherein the performance metrics are selected from the group consisting of retransmission rate, fragmentation, packet sizes, and drop/reset rates.

34. (Original) The enterprise load system for testing a system under test available on a communications network of claim 27 wherein the controller is responsive to instructions directed to the enterprise load system for changing a behavior of the simulated network traffic.

35. (Currently amended) A method of testing a system under test available on a communications network, the method comprising:

simulating real-world network traffic on the communications network

generating ~~interactive transactions~~ stateful TCP connections across the communications network with the system under test, ~~each interactive transaction including receiving at least one~~

~~packet from the system under test and sending at least one response packet in response to the received packet~~

measuring performance metrics of the system under test in supporting the interactive transactions stateful TCP connections ~~from the second means~~ in the presence of the simulated real-world network traffic ~~on the communication network from the first means~~

changing quantity and quality of the simulated real-world network traffic ~~simulated by the first means~~

wherein the steps of simulating, generating and measuring are performed concurrently.

36. (Cancelled)

37. (Original) The method of testing a system under test available on a communications network of claim 35, wherein the simulated network traffic is generated by a stateless packet processor.

38. (Original) The method of testing a system under test available on a communications network of claim 35, wherein the system under test comprises a stateful application which uses underlying services of TCP.

39. (Currently amended) The method of testing a system under test ~~software system~~ available on a communications network of claim 38, wherein the system under test comprises an HTTP server.

40. (Original) The method of testing a system under test available on a communications network of claim 38, wherein the system under test comprises an FTP server.

41. (Currently amended) The method of testing a system under test available on a communications network of claim 35 further comprising

modifying a behavior of the simulated network traffic

continuing to generate interactive transactions with the system under test software system

continuing to measure performance of the system under test-~~software system~~.

42. (Currently amended) The method of testing a system under test available on a communications network of claim 41, the modifying step comprising using the performance metrics to modify the behavior of the simulated network traffic to more closely simulate a realistic mix of network traffic.

43. (Original) The method of testing a system under test of claim 42 wherein the performance metrics are selected from the group consisting of retransmission rate, fragmentation, packet sizes, and drop/reset rates.

44. (Original) The method of testing a system under test available on a communications network of claim 41, the modifying step comprising a user using a control program to change the behavior of the simulated network traffic via a system interface.

45. (Currently amended) The method of testing a system under test available on a communications network of claim ~~41~~44, the modifying step comprising the user managing multiple ports in a coordinated fashion.